

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MISSOURI  
EASTERN DIVISION

GREEN EDGE ENTERPRISES, LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	No. 4:02CV566TIA
	)	
RUBBER MULCH ETC., LLC,	)	
LANDSCAPE TECHNOLOGIES LLC,	)	
and RUBBER RESOURCES, LTD., LLLP,	)	
	)	
Defendants.	)	
	)	
AND RELATED CLAIMS	)	

**MEMORANDUM AND ORDER**

This matter is before the Court on Defendants Rubber Mulch Etc., LLC and Rubber Resources Ltd., LLLP's Motion for Summary Judgment. The parties consented to the jurisdiction of the undersigned pursuant to 28 U.S.C. § 636(c).

**Facts**

This case involves the validity of a patent for synthetic mulch ('514 patent), which consists of shredded rubber coated with a durable colorant substance. On October 1, 1997, inventors Lee Greenberg and Judy Smith, who are also members of Plaintiff Green Edge Enterprises, LLC ("Green Edge"), applied for United States Patent No. 5,910,514 ('514 patent) for "synthetic mulch." (First Amended Complaint, ¶¶ 9-10) On June 8, 1999, the PTO issued the '514 Patent, which abstract states:

The present invention relates to synthetic wood chips and methods for making the same. The synthetic wood chips are made from rubber particles, such as ground up tires, and a colorant which colors the rubber particles to look like natural mulch. The synthetic mulch is available in a wide variety of shapes and sizes, however, it is preferred

for the synthetic mulch to look like wood chips, tree bark, or pea gravel.

(Pl. Exh. 1 -- Doc. #232) The Detailed Description specifies that this synthetic mulch “is especially desirable because it is designed and dimensioned to look like natural mulch so that it has an attractive appearance.” (Pl. Exh. 1 -- Doc. #232) In addition, “it functionally holds moisture in soil covered by the mulch, prevents weed growth, is not hazardous, does not attract insects, and provides protection for roots.” (Pl. Exh. 1 -- Doc. #232) The use of rubber is preferred because it is easily covered with water based acrylic colorant “which is especially desirable for use with the rubber chips because a synthetic mulch is formed which has a natural look and which does not lose its coloration with the passage of time.” (Pl. Exh. 1 -- Doc. # 232) Further, the most preferred water based acrylic systems are “sold under the name ‘VISICHROME’, by Futura Coatings, Inc. of Hazlewood [sic], Mo. (Pl. Exh. 1 -- Doc. #232)

Claim 1 of the ‘514 Patent claims:

1. A synthetic mulch material sized, shaped, and colored to imitate a natural mulch, wherein said synthetic mulch is comprised of:

- a) a plurality of rubber particles, with the rubber selected from the group consisting of natural polymers and synthetic high polymers, with said rubber particles having an outer surface designed and dimensioned to look like natural mulch selected from the group consisting of pea gravel, wood chips, and tree bark, and a length ranging between about 1/16 inch and about 8 inches and a width ranging between about 1/16 inches and about 2 inches; and,
- b) an amount of water based acrylic colorant added in an amount equal to between about 3% and about 10% by weight of said rubber particles, with said colorant coating said rubber particles thereby forming said synthetic mulch.

(Pl. Exh. 1 -- Doc. #232)

On March 18, 1994, Jakubisin, the '172 patent, was filed, and the PTO issued said patent on August 6, 1996. (Foster Decl., App. D) Said patent is entitled "Fall Zone Covering for Playground." (Foster Decl., App. D) The patent abstract states that the invention is "[r]ubber slivers which are encapsulated within a protective, decorative film of weather-resistant and color-fast resin are used as unconsolidated fall zone material around and under playground equipment." (Foster Decl., App. D, Abstract) These rubber slivers include "fragments produced by shredding, milling, buffing and comminution of used rubber tires . . ." (Foster Decl., App. D, col. 2, lines 32-34) The colorant "predominantly contains water as a solvent and/or dispersing agent." (Foster Decl., App. D, col. 2, lines 51-52) Further, the method disclosed in the '172 patent consists of spraying the rubber particles with a liquid coating as they fall through a drop zone. (Foster Decl., App. D, col. 1, lines 56-58)

With regard to the '514 patent, Futura worked with Green Edge to develop a coating system for coloring rubber particles. (Foster Decl., Exh. 6, Smith Depo. pp. 27-28) Prior to 1997, Futura did not have a water based acrylic colorant system for coloring rubber, nor was Futura aware of another water based acrylic colorant system on the market. (Foster Decl., Exhs. 10, Greenberg Depo. p. 13, and 6, Smith Depo. pp. 18-19) In a letter dated July 29, 1999 to Mr. Greenberg, Jeff Jarboe, Sales Manager of Futura Coatings, used the name "VISICHROME" for the colorant system. (Pl. Additional Facts ¶ 31; Pl. Exh. 4 -- Doc. #232) Futura held the exact formulation of the coating products as proprietary and never disclosed the formulation to Mr. Greenberg or Ms. Smith. (Pl. Additional Facts ¶ 37; Def. Facts ¶¶ 12, 13; Pl. Exh. 6 -- Doc. #232, pp. 27-28) However, the product also was designated by product number 24009. (Def. Facts ¶ 19; Foster Decl., Exh. 7, Dean Jarboe Depo. pp. 39-40, 66-67, 85-85, Exh. 15, Walker Decl. ¶ 7) Despite the 1999 letter, Jeff

Jarboe could not remember why he used that term in reference to the colorant system. (Pl. Exh. 5 -- Doc. #232, p. 25) Indeed, Futura did not use the term VISICHROME to designate an acrylic colorant. (Foster Decl. Exh 7, Dean Jarboe Depo. p. 27, Exh. 15, Walker Decl. ¶¶ 6, 7)

On January 10, 2005, Plaintiff filed its First Amended Complaint, alleging patent infringement against Defendants Rubber Mulch Etc., LLC and Rubber Resources Ltd. (collectively “Rubber Mulch”). In response, Rubber Mulch seeks declaratory judgment of the invalidity of the ‘514 Patent. Plaintiff Green Edge responds that the ‘514 patent is valid and that Rubber Mulch’s claims to the contrary must fail.

### **Standard for Ruling on Summary Judgment**

Pursuant to Federal Rule of Civil Procedure 56(c), a court may grant a motion for summary judgment only if all of the information before the court shows "there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c). See Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986). The court must view the evidence and all reasonable inferences in the light most favorable to the non-moving party. Hutson v. McDonnell Douglas Corp., 63 F.3d 771, 775 (8th Cir. 1995). The United States Supreme Court has noted that, “[s]ummary judgment procedure is properly regarded not as a disfavored procedural shortcut, but rather as an integral part of the federal rules as a whole, which are designed to ‘secure the just, speedy and inexpensive determination of every action’.” Celotex, 477 U.S. at 327 (1986) (quoting Fed. R. Civ. P. 1).

The initial burden of proof is placed on the moving party to establish the non-existence of any genuine issue of fact that is material to a judgment in its favor. City of Mt. Pleasant, Iowa v.

Associated Elec. Co-op., Inc., 838 F.2d 268, 273 (8th Cir. 1988). Once this burden is discharged, if the record does in fact bear out that no genuine dispute exists, the burden then shifts to the non-moving party who must set forth affirmative evidence and specific facts showing there is a genuine dispute on that issue. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 249 (1986). When the burden shifts, the non-moving party may not rest on the allegations in its pleadings, but by affidavit and other evidence must set forth specific facts showing that a genuine issue of material fact exists. Fed. R. Civ. P. 56(e).

Under 35 U.S.C. § 282, “[a] patent shall be presumed valid.” “To overcome this presumption of validity, the party challenging a patent must prove facts supporting a determination of invalidity by clear and convincing evidence.” Schumer v. Laboratory Computer Sys., Inc., 308 F.3d 1304, 1315 (Fed. Cir. 2002) (citations omitted); see also Apple Computer, Inc. v. Articulate Sys., Inc., 234 F.3d 14, 20 (Fed. Cir. 2000) (citation omitted) (“Summary judgment of invalidity, therefore, must be predicated on facts established by clear and convincing evidence.”).

### **Discussion**

Rubber Mulch raises several arguments in support of its assertion that the ‘514 patent is invalid. Rubber Mulch maintains that the patent is invalid for failure to disclose the best mode and enablement of the invention. It also contends that each claim is invalid because it is anticipated by prior art and because the ‘514 patent is obvious.

“Patents are, by statute, presumed to be valid.” U.S. Gypsum Co. v. National Gypsum Co., 74 F.3d 1209, 1212 (Fed. Cir. 1996). Thus, Rubber Mulch has the burden of demonstrating by clear and convincing evidence that the ‘514 patent is invalid. Id. (citation omitted). While Rubber Mulch primarily focuses on anticipation and obviousness, the undersigned finds that the ‘514 patent is invalid

for failure to disclose the best mode. Therefore, this Court will thoroughly address that issue.

Under 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

With regard to the best mode requirement, it “precludes inventors ‘from applying for patents while at the same time concealing from the public preferred embodiments of their inventions which they have in fact conceived.’” High Concrete Structures, Inc. v. New Enterprise Stone and Lime Co., Inc., 377 F.3d 1379, 1383 (Fed. Cir. 2004) (quoting In re Gay, 309 F.2d 769, 772 (C.C.P.A. 1962)). In determining whether a patent complies with the best mode requirement:

First, it must be determined whether, at the time the patent application was filed, the inventor had a best mode of practicing the invention. ... This inquiry is wholly subjective and addresses whether the inventor must disclose any facts in addition to those sufficient for enablement. ... Second, if the inventor had a best mode of practicing the claimed invention, it must be determined whether the specification adequately disclosed what the inventor contemplated as the best mode so that those having ordinary skill in the art could practice it. ... The latter question is largely an objective inquiry that depends upon the scope of the claimed invention and the level of skill in the art.

U.S. Gypsum Co. v. National Gypsum Co., 74 F.3d 1209, 1212 (Fed. Cir. 1996) (internal citations and quotations omitted). Further, “[i]nvalidation based on a best mode violation requires that the inventor knew of and intentionally concealed a better mode than was disclosed.” High Concrete Structures, Inc. v. New Enterprise Stone and Lime Co., Inc., 377 F.3d 1379, 1383 (Fed. Cir. 2004). This rule, however, is not so limited. U.S. Gypsum, 74 F.3d at 1215. “A best mode violation may occur if the disclosure of the best mode is so objectively inadequate as to *effectively* conceal the best

mode from the public.” Id.

In the instant case, there is no dispute as to whether the inventors had a best mode of practicing the invention. The disputed issue pertains to “whether the ... specification discloses [Green Edge’s] best mode in a way that would enable those having ordinary skill in the art to practice it.” U.S. Gypsum Co. v. National Gypsum Co., 74 F.3d 1209, 1213 (Fed. Cir. 1996). Rubber Mulch contends that Green Edge’s ‘514 patent fails to disclose the best mode for the claimed colorant in that the patent discloses only an incorrect product name, VISICHROME, that would make it virtually impossible for anyone to discover the inventors’ contemplated best mode. Mr. Terry Walker, a Futura employee, testified that 24009 was the code number that Futura used for the coating developed to color recycled rubber to produce synthetic mulch. (Foster Decl., Exh. 15, Walker Decl., ¶ 7) That formulation and product is no longer available. (Foster Decl., Exh. 15, Walker Decl., ¶¶ 9, 10) In addition, Green Edge ordered the colorant by number, as evidenced by purchase orders from Green Edge to Futura using a number, not name, for the colorant. (Foster Decl., Exh. 7, Dean Jarboe Depo. pp. 39-40, 66-67, 85-86; Pl. Exh. 24 -- Doc. #232)

Green Edge disputes this by pointing out Jeffrey Jarboe’s July 29, 1997 letter referring to the colorant as “VISICHROME.” (Pl. Exh. 4 -- Doc. #232) However, Jeffrey Jarboe could not remember why he used that term in reference to the colorant system. (Pl. Exh. 5 -- Doc. #232, p. 25) Indeed, the colorant was designated by product number 24009, and the coating product VISICHROME did not exist. (Walker Decl. ¶¶ 6, 7; Foster Decl., Exh. 7, Dean Jarboe Depo. pp. 27, 43, 57-58)

The undersigned agrees with Rubber Mulch that GreenEdge failed to properly disclose the best mode of their invention, thus invalidating the patent. The application of the best mode

requirement begins with the language of the claim. Teleflex, Inc. v. Ficosa North America Corp., 299 F.3d 1313, 1332 (Fed. Cir. 2002). Claim 3 of the Patent states that “[t]he synthetic mulch of claim 1 wherein said colorant is a water based acrylic called VISICHROME.” (Pl. Exh. 1 -- Doc. # 232, col. 6, lns. 19-20) In addition, the Patent specifies that “[t]he most preferred colorants are water based acrylic systems such as the colorant systems sold under the name “VISICHROME”, by Futura Coatings, Inc. of Hazlewood [sic], Mo. (Pl. Exh. 1 -- Doc. # 232, col. 5, lns. 4-7) Plaintiffs Greenberg and Smith acknowledged that, to their knowledge, Futura was the only manufacturer of such water based acrylic colorant system, and no other similar water-based acrylic were available in 1997. (Foster Decl. Exh. 10, Greenberg Depo, pp. 15, 17-18, 86; Exh. 6, Smith Depo. pp. 18, 31, 143-144)

In an Order regarding claim construction, this Court construed “water based acrylic colorant” as “a water-based substance having both a pigment and an acrylic component.” (Memorandum and Order of May 29, 2007). Further, the Court defined “VISICHROME” as “a water-based acrylic colorant system used to color rubber particles.” (Id.) However, nowhere in the patent does Plaintiff disclose the best mode of obtaining said colorant. Green Edge has presented no evidence demonstrating that it ever used the name “VISICHROME” to obtain the colorant necessary to carry out the invention. Therefore, the fact that Green Edge disclosed a misleading, non-existent name instead of the number, in addition to the fact that no similar product was available on the market, demonstrates concealment.

Although Plaintiff Green Edge relies heavily on Advanced Cardiovascular Systems, Inc. v. Scimed Life Systems, Inc., 783 F. Supp. 413 (D. Minn. 1991), the facts are not analogous. In that case, the District Court of Minnesota determined that the patent holder adequately disclosed the best



mode because the patent described the brazing technique. Id. at 415. Further, knowledge of brazing was common in the industry. Id. at 414. The court determined that, while the patent application could have been more explicit, the discussion was not so deficient to establish concealment. Id. at 415.

In the instant case, Green Edge's failure to disclose the best mode of coloring the rubber particles invalidates the patent. The essence of the best mode requirement mandates that the inventor "disclose the best mode contemplated by him, as of the time he executes the application of carrying out his invention." Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc., 783 F. Supp. 413, 415 (D. Minn. 1991). A party arguing that the court should reject a patent must demonstrate "that the 'quality of an applicant's best mode disclosure is so poor as to effectively result in concealment.'" Id. (quoting DeGeorge v. Bernier, 768 F.2d 1318, 1324 (Fed. Cir. 1985)). Green Edge maintains that "[a]nyone skilled in the art would have still verified with Futura that the product they were inquiring about, either VISICHROME or #24009, was in fact a water based acrylic colorant system for coloring rubber."<sup>1</sup> (Pl. Memo. in Opposition to Def. Rubber Mulch's 7/2/2007 Motion for Summary Judgment, p. 41) However, this statement does not address how one of ordinary skill in the art would have found the inventors' best mode, as Futura had no coating named "VISICHROME," and the patent failed to reveal the product number. Given only this misleading name with no corresponding number, no one skilled in the art would be able to discern the best mode of the invention. See Wang Labs., Inc. v. Mitsubishi Elec. America, Inc., 103 F.3d 1571, 1983 (Fed. Cir. 1997) .

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<sup>1</sup> While this information would have enabled a person to obtain the colorant, Green Edge fails to demonstrate that it disclosed its best mode.

As stated by former high-level employees of Futura, VISICHROME was not a product and was not related to acrylic coatings; Futura never sold a coating product called VISICHROME; and Futura designated the coating product used to color recycled rubber by a product code 24009. Further, Green Edge acknowledged that there was no known acrylic colorant system on the market besides the Futura product. The only product was that developed by Futura, which Green Edge obtained by a number, not a name. “To be sure, if the best mode for carrying out a claimed invention involves novel subject matter, then an inventor must disclose a method for obtaining that subject matter even if it is unclaimed.” Eli Lilly and Co. v. Barr Labs., Inc., 251 F.3d 955, 964 (Fed. Cir. 2001) (citations omitted). In Eli Lilly, the Court found that the patent holder did not violate the best mode requirement because the record demonstrated that the method for obtaining the subject matter was commercially available at the time Lilly filed its original application. Id. at 964-965. Such is not the case here, where the water-based acrylic colorant was not commercially available. Indeed, Dean Jarboe testified that Futura had an arrangement with Green Edge in the October 1997 time frame that the coating developed by Futura would be supplied exclusively to Green Edge. (Foster Decl., Dean Jarboe Depo. p. 29)

The undersigned therefore finds that Defendant Rubber Mulch has clearly and convincingly demonstrated that there is no genuine issue of material fact with regard to best mode. At the time of filing, Plaintiff Green Edge failed to disclose the best mode for carrying out the ‘514 Patent by providing an inaccurate and non-existent name for the product in lieu of the order number Plaintiff actually used. This disclosure is so poor as to constitute concealment, and the patent is invalid in its entirety. Therefore, summary judgment in favor of the Defendants Rubber Mulch Etc., LLC and Rubber Resources Ltd., LLLP is warranted, and this case must be dismissed. Further, based on the

invalidity of the patent, Rubber Mulch's alternative arguments regarding anticipation, obviousness, and enablement are moot, and the Court need not address those claims.

In response to Rubber Mulch's Motion for Summary Judgment, Green Edge also filed a Motion to Strike the affidavits of Steve Urvan, Ronald Foster, and Martin Javorek. (Doc. #225) In addition, after a Supplemental Memorandum from Rubber Mulch after Green Edge filed its Reply Memorandum, Green Edge filed a Motion to Strike Defendants' Supplemental Memorandum. (Doc. #230) However, because the Court did not rely on these affidavits for its determination that the '514 patent is invalid based upon failure to disclose the best mode, the Court will deny these motions as moot.

Accordingly,

**IT IS HEREBY ORDERED** that Rubber Mulch Etc., LLC and Rubber Resources Ltd.'s Motion for Summary Judgment [Doc. #218] is **GRANTED**. A final judgment shall accompany this Memorandum and Order.

**IT IS FURTHER ORDERED** that Plaintiff's Motion to Strike Affidavits [Doc. #225] and Motion to Strike Defendant's Supplemental Memorandum [Doc. #230] are **DENIED** as **MOOT**.

/s/ Terry I. Adelman  
UNITED STATES MAGISTRATE JUDGE

Dated this 25th day of March, 2008.